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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/519,856 | 12/29/2004 | David Aaron Crowther | PU020329 | 9304 |
| 24498 7590 06/21/2007 JOSEPH J. LAKS, VICE PRESIDENT THOMSON LICENSING LLC PATENT OPERATIONS PO BOX 5312 PRINCETON, NJ 08543-5312 | | | EXAMINER BADAWI, SHERIEF | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/519,856

Applicant(s)

CROWTHER ET AL.

Examiner

Sherief Badawi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 May 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12-29-2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Amendment filed on May 5, 2007 has been received and entered. Application 10/519,856 Claims 1-11 are now pending.

Response to Amendment

2. Applicants Amendment has overcome the previous, drawings, specifications, claim objections and rejections under 35 USC 112 and 35 USC 102(e) rejection. The rejection therefore, withdrawn.
3. Therefore the art rejections are maintained and finalized due to new grounds of rejection

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claim 1-11** is rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin et al. (U.S. Patent No. 7,171,624 B2) filed on October 5, 2001, further in view of Lavallee et al. (US 7003527) filed on June 27, 2002

As per **Claims 1 and 7**, Baldwin discloses a method for managing at least one storage device (management of a storage area network; Abstract, lines 1-2, as taught by Baldwin),

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comprising the steps of: (a) identifying the at least one storage device; **(the identification of the physical storage device; Paragraph.21, lines 5-6, as taught by Baldwin)**. b) Establishing a database containing information about the identified device; **(Further aspects of the invention provide systems as described above in which the manager maintains in a relational database a topological or other representation of the storage area network, or aspect thereof; Paragraph.32, lines 1-4, as taught by Baldwin)**. Wherein the information about the identified at least one storage device includes operating characteristics of the identified at least one storage device; Baldwin discloses identifying operating characteristics of storage devices **(see Column.18, lines 55-67 where the invention retrieves requisite parameter, such as command parameters from the database, as taught by Baldwin)** furthermore Baldwin discloses vendor and manufacturer related detection and performing operations on identified devices which is clearly and operational characteristic that is detected to be able to perform operational tasks on devices in the storage area network. To expedite the prosecution the Examiner presents a secondary teaching Lavalley which clearly discloses information about the identified at least one storage device includes operating characteristics (See Lavalley Columns.3-4, wherein Lavalley clearly discloses management station which includes management application that operates in application programming interface designed for universal management and control of elements (eg. Devices, programs, adapters) manufactured or provided from different vendors within the storage area network, wherein to manage different storage devices requires the acquiring functional and operational components for a particular device) (c) Providing to the user a graphical user interface in accordance with the information in the database, the graphical interface displaying at least one menu option for the identified at least one storage device for the user to select at least one of (i) display of the

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information about the identified at least on storage device and; **(provide a system as described above in which the GUI provides for selective display of storage devices, or logical units, depending upon their storage capacity or other quantitative attributes; paragraph.28, lines 1-5, as taught by Baldwin).** (ii) Execution of at least one process to control the operation of the at least one storage device; **(management of a storage area network (SAN), executes a process; abstract lines 1-2. According to one such aspect of the invention, the invention provides an improved SAN of the type having one or more digital data processors, e.g., hosts of the type described above, in communication with one or more storage devices, e.g., LUNs. The host (or other digital data processor) is of the type with an operating system that utilizes (i) a port driver to define a software interface between a class driver and an adapter to which one or more of the storage devices are coupled, and (ii) a class driver that claims storage devices for access, e.g., by the operating system and any applications programs executing therein, by invoking the port driver to which the host is coupled; Paragraph.91, lines 1-10, as taught by Baldwin).** d) processing the user-selected menu option; **(processing in connection with those tasks; Paragraph.34, lines 5-6, as taught by Baldwin).** (e) Automatically updating the graphical user interface in response to the processing of the user-selected menu option. **(A graphical output device displays the SAN representation. A further process, herein referred to as a user interface process, controls the output device for purposes of displaying that representation. An interface element, residing on the manager digital data processor or another data processor, effects retrieval of the SAN representation, for example, in response to a request from the user interface process. It transmits that representation to the user interface process for display on the graphical output device; Paragraph.117, lines 6-14, as taught by Baldwin).**

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Therefore, it would have been obvious to a person of ordinary skill in the computer art at the time of the invention was made to incorporate the Lavallee to Baldwin system. Skilled artisan would have been motivated acquire or include operational characteristics to the storage area network management systems to provide a consolidated and complete management of storage area networks. In addition, both of the references (Baldwin and Lavallee) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as, storage area network management. This close relation between both of the references highly suggests an expectation of success.

As per **Claims 2 and 8**, the rejection of claim 1 is hereby incorporated by reference; the combination of Baldwin and Lavallee discloses step of identifying the one storage device comprises the step of ascertaining a manufacturer and model number for the at least one storage device; **(Figures 16-17, as taught by Baldwin).**

As per **Claims 3 and 9**, the rejection of claim 1 is hereby incorporated by reference; the combination of Baldwin and Lavallee discloses establishing a database comprises the step of obtaining information that includes at least one of (a) operational rules, (b) commands and (c) processing routines of the at least one storage device; **(the invention provides a SAN as described above in which the manager maintains policies for handling events pertaining to (i) attributes of at least selected hosts and/or (ii) establishment of relationships of at least selected hosts with one or more storage units. A policy engine included within the manager responds to notification of at least a selected event by effecting execution of an action**

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according to the policy maintained therefor; Paragraph.30, lines 1-6. Fig.17, as taught by Baldwin).

As per **Claims 4 and 10**, the rejection of claim 3 is hereby incorporated by reference; the combination of Baldwin and Lavalley discloses determining if the requested execution of the at least one process complies with the operational rules for the identified at least one storage device, operational rules for the identified device, **(The rules section is comprised of multiple rules--one or more rules per managed device. The rule itself is comprised of two sections--the id section and the management information section. The id section is used to uniquely identify the device to be managed. The management information section is a collection of multiple types of management information, each one describing a certain method for managing the particular device; paragraph.414, lines 1-7. Defined control characters are allowed in the rules file and cause specific actions to occur depending on the control character; Paragraph.422, lines 1-2, as taught by Baldwin).** and if not, blocking execution of the at least one process; and generating an error message; **(Defined control characters are allowed in the rules file and cause specific actions to occur depending on the control character; Paragraph.422, lines 1-2. a severe error message can be generated; Paragraph.189, line 2, as taught by Baldwin).**

As per **Claims 5 and 11**, the rejection of claim 1 is hereby incorporated by reference; the combination of Baldwin and Lavalley discloses a graphical user interface includes the steps of: displaying icons representative of each identified at least one storage device in a hierarchical fashion in a first pane; and displaying information in a second pane related a corresponding one of the icons displayed in the first pane; **(a topological, hierarchical or enumerated (i.e., listing) display of**

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SAN components can be accompanied by a display of component properties (e.g., identity of LUNs in a physical storage device, and so forth). The latter display, too, is beneficially generated only upon selection of a specific component in the former display. In a related aspect, data necessary for generating the latter (i.e., a component property) display is retrieved, for example, from a local or remote database, only upon selection of a specific component in the former display; Paragraph.27, lines 1-8. Figures. 16-17, as taught by Baldwin).

As per **Claim 6**, the rejection of claim 1 is hereby incorporated by reference; the combination of Baldwin and Lavallee discloses steps (d) and **(processing in connection with those tasks; Paragraph.34, lines 5-6, as taught by Baldwin)**. (e) are repeated following receipt of each subsequent menu selection made by a user; **(A graphical output device displays the SAN representation. A further process, herein referred to as a user interface process, controls the output device for purposes of displaying that representation. An interface element, residing on the manager digital data processor or another data processor, effects retrieval of the SAN representation, for example, in response to a request from the user interface process. It transmits that representation to the user interface process for display on the graphical output device; Paragraph.117, lines 6-14, as taught by Baldwin).**

Response to Arguments

6. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-Form 892 for listed of cited references.

Point of Contact

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherief Badawi whose telephone number is (571) 272-9782. The examiner can normally be reached on Monday through Friday 7:30-5:00, Alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pierre Vital can be reached on (571) 272-4215. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

6/18/2007

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